the frame, means for performing edge detection within the boundary to identify and locate edges of said object, and storing means for storing a geometric model of said object.

5. (Amended) An apparatus as claimed in claim 1, wherein said means for extracting attributes of said object also includes means for recording at least one of the attributes of shape, size, position, colour, texture, intensity gradient of said object, and time series statistics based on said attributes.

6. (Amended) An apparatus as claimed in claim 1, wherein said means for extracting attributes of said object includes means for comparing said attributes of said object with attributes of objects previously stored to determine whether the object is distinguishable therefrom, and when said object is determined not to be distinguishable, providing means for re-defining the object.

7. (Amended) An apparatus as claimed in claim 1, wherein said means for extracting attributes of said object includes means for comparing the location in the frame of said object with the location of objects already stored for that frame to determine whether that object is distinguishable therefrom, and where the location of said object is not distinguishable from the location of another object providing means for assigning rank to the objects to determine which object will be associated with that location.

8. (Amended) An apparatus, as claimed in claim 1, wherein the means for utilising the attributes of the object for tracking the object includes means for updating the stored attributes of the object as the attributes of the object change from frame to frame.

9. (Amended) An apparatus as claimed in claim 1, wherein said tracking means utilising the attributes of the object for tracking the object includes plural algorithm means for calculation of independent tracks of objects for use depending on the visual
complexity of a sequence to automatically track said objects in different types of visual environment.

10. (Amended) An apparatus as claimed in claim 1, wherein said tracking means for utilising the attributes of the object for tracking the object includes means for converting all the frames to be tracked to a low-level representation, means for determining the position of each object in the frames by minimising a distance measure to locate each object in each frame, means for processing the positions of said object to smooth over occlusions and the entrances and exits of objects into and out of said frames, and means for reviewing the object within a tracked sequence and for correcting the location attributes of any misplaced objects.

11. (Amended) An apparatus, as claimed in claim 1, wherein the means for associating interactive data with the object in the key-frame includes means for providing a database of different types of data including one or more of URLs, HTML pages, video clips, audio clips, text files and multimedia catalogues, and means for selecting said interactive content data from the database to associate with said object.

12. (Amended) An apparatus, as claimed in claim 1, wherein the means for associating interactive data with the object in the key-frame produces said data sequence using means for determining whether the embedded interactive content data is frame synchronous
data associated with object positions, shapes, ranks and pointers in a frame, or group-synchronous data associated with all the objects in a group, or is data to be streamed just in time, wherein means are provided for associating frame synchronous data with the corresponding frame, means are provided for associating group synchronous data with the frame at which a group changes, and means are provided for streaming just in time data to a user before

it is required to be associated with the corresponding objects.

13. (Amended) An apparatus as claimed in claim 1, wherein means are provided to associate different interactive content data with respectively different objects.

16. (Amended) A method as claimed in claim 14, wherein step c) includes the step of producing a hierarchy of groups of sequences of shots.

17. (Amended) A method as claimed in claim 14, wherein step e) includes the steps of: isolating the object within a boundary formed on the frame, performing edge detection within the boundary to identify and locate edges of said object, and step f) includes storing a geometric model of said object.

18. (Amended) A method as claimed in claim 14, wherein step f) includes the step of recording at least one of the attributes of shape, size, position, colour, texture, intensity gradient of said object, and time series statistics based on said attributes.

19. (Amended) A method as claimed in claim 14, wherein step f) includes the step of comparing said attributes of said object with attributes of objects previously stored to determine whether the object is distinguishable therefrom, and when said object is determined not to be distinguishable, the step of redefining the object.

20. (Amended) A method as claimed in claim 14, wherein step f) includes the step of comparing the location in the frame of said object with the location of objects already stored for that frame to determine whether that object is distinguishable therefrom, and where the location of said object is not distinguishable from the location of another object, the step of assigning rank to the objects to determine which object will be associated with that location.

21. (Amended) A method, as claimed in claim 14, wherein step h) includes the step of updating the stored attributes of the object as the attributes of the object change from frame to frame.

22. (Amended) A method as claimed in claims 14, wherein step h) includes the step of using plural algorithm means for calculation of independent tracks of objects for use depending on the visual complexity of a sequence automatically to track said objects in different types of visual environment.

23. (Amended) A method as claimed in claim 14, wherein step h) includes the steps of converting all the frames to be tracked to a low-level representation, determining the position of each object in the frames by minimising a distance measure to locate each object in each frame, processing the positions of said object to smooth over occlusions and the entrances and exits of objects into and out of said frames, reviewing the object within a tracked sequence and correcting the location attributes of any misplaced objects.

24. (Amended) A method, as claimed in claim 14, wherein step g) includes the steps of providing a database of different types of data including one or more of URLs, HTML pages, video clips, audio clips, text files and multimedia catalogues, and selecting said interactive content data from the database to associate with said object.

25. (Amended) A method, as claimed in claim 14, wherein step j) includes determining whether the embedded interactive content data is frame synchronous data associated with object positions, shapes, ranks and pointers in a frame, or group-synchronous data associated with all the objects in a group, or is data to be streamed just in time, and associating frame synchronous data with the corresponding frame, associating group synchronous data with the frame at which a group changes, and streaming just in time data to a user before it is required to be associated with the corresponding objects,